TALAYEV, M. V.

*A New Method of Determining the Grain-Size and Specific Surface of Powders as Used in Powder Metallurgy. B. V. Deryagin, N. N. Zakhavaeva, and M. V. Talaev (Zhur. Tekhn. Fiziki, 1955, 25, (5), 881–886).—[In Russian]. The method and apparatus are similar to those developed by D. for appn. to phys. chemistry. Air at low pressure is filtered through the powder, and the resistance to its flow is measured. Obviously, the finer the powder, the greater the resistance. Provided that the pressure of air is low enough for interactions between air mol. to be ≪ interactions between air mol. and powder particles (i.e. the molecular mean free path ≫ particle spacing), it is possible to calculate accurately the sp. surface area of the powder. Full aerodynamic theory and description of D.'s apparatus are given. As a test, results on powders of Cu (6–10 μ), Fe (7–12 μ), and Al (60–600 μ) are compared with microscopic measurements. Good agreement is obtained for Cu and Fe. Agreement for the Al powders is bad, as they were in the form of spiral-shaped shavings: the microscope measured the overall dimensions, while the physico-chem. method took account of the spaces in the middle of the spirals.—A. F. B.

2

TALAYEVA, Yu.G., mladshiy nauchnyy sotrudnik

Conference on problems in sanitation bacteriology. Gig. & san. 23 no.3:88-89 Mr '58. (MIRA 11:4)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni A.N. Sysina MN SSSR.
(BACTERIOLOGY--CONGRESSES)

TALAIKO-KALASHNIKOVA, A.

BELAIA, N. K., TALAIKO-KALASHNIKOVA, A. Z.

Telluride test as quick and early diagnosis of diphtheria. Pediatriia, Moskva No. 6, Nov.-Dec. 50. p. 59-63

1. Of the Central Scientific-Research Pediatric Institute of the Ministry of Public Health RSFSR (Director--Prof. S. P. Borisov).

CLM, 20, 3, March 1951

TALAYKO-KALASHNIKOVA, A.Z.; GUSEVA, A.[illegible] zaveduyushchaya; BIRGER, O.G., nauchnyy rukovoditel'; PROKHOROVICH, Ye.V., glavnyy vrach; SHIRVINDT, B.G., zaveduyushchiy.

Experimental study of the diagnostic tellurite test. Zhur.mikrobiol.epid.i immun. no.4:25-28 Ap '53. (MLRA 6:6)

1. Tsentral'naya laboratoriya Klinicheskoy detskoy bol'nitsy (for Guseva and Birger, Talayko-Kalashnikova). 2. Klinicheskaya detskaya bol'nitsa (for Prokhorovich). 3. Infektsionnyy otdel Nauchno-issledovatel'skogo pediatricheskogo instituta Ministerstva zdravookhraneniya RSFSR (for Shirvindt, Talayko-Kalashnikova). (Diphtheria)

TAL'BERG, N.

Our past. Nashi vesti no. 58:1-3 Jl '54. (MLRA 7:9)
(Russia--History, Military) (Myshetskii Family)

TAL'BERG, N.

In memory of King Alexander; on the 20th anniversary of his assassination. Nashi vesti no.64:1-4 O '54. (MLRA 7:10)
(Alexander I, King of Yugoslavia, 1888-1934)

TAL'BERG, N.

The Tsar and his soldiers. Nashi vesti 10 no.55:1-3 My '54. (MLRA 7:5)
(Russia--History)

TAL'BERG, N.

The Tsar and his soldiers (conclusion). Nashi vesti 10 no.57: 2-4 Je '54. (MLRA 7:7)
(Nicholas II, 1868-1918) (Russia--Army)

TAL'BERG, N.

From history's treasure box. Nashi vesti no.72:1-3 F '55.(MLRA 8:1)
(Suvorov, Aleksandr Vasil'evich, 1729-1800) (Russia--History, Military)

TAL'BERG, N.

Supreme commander; on the 100th anniversary of the death of Emperor Nicholas I. Nashi vesti no.74:1-5 Mr '55. (MLRA 8:3)
(Nicholas I, 1796-1855)

TAL'BERGS, Kh.V. [Talbergs, H.]

Turntable for finishing operations. Sbor.vnedr.rats.pred. v les. i meb.prom. no.2:98-100 '59. (MIRA 13:8)

1. Rizhskiy derevoobrabatyvayushchiy zavod "Assotsiatsiya."
(Furniture industry--Equipment and supplies)

TALBIERSKI, J.

Talbierski, J.; Domanski, H.

"Influence of the shape and cross section of an element on the resistance of concrete to squeezing." Biuletyn.p. 17A (Inzyniera I Budownictwo, Vol. 10, No.8, Aug. 1953, Warszawa)

SO: Monthly List of East European Accessions, Vol. 3, No. 6, Library of Congress, June, 1954, Uncl.

TALBIERCKI, J.

Experiences and achievements of the Institute of Building Construction in the field of the accelerated curing of concrete.

p. 25 (Budownictwo Przemyslowe) Vol. 4, No. 9, Sept. 1955, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

[illegible], T.; [illegible], P.; [illegible], B.

Model building activities and modern Danish building at the Copenhagen meeting. P. [illegible] (Budowictwo Przemysłowe, Vol. [illegible], No. [illegible], July/Aug 1956, Warsaw, Poland)

Source: Monthly List of East European Accessions (EEAI) LC, Vol. 6, No. 8, Aug 1957, Unclas.

PROCESSES AND PROPERTIES INDEX

Lactic acid bacteria as producers of aroma in butter.
Dagmara Lalec-Niedra. *Acta Univ. Lativiensis, Lauks. Saimniecibas Fakultat. Ser.* 3, No 1-3, 49-94, 104-104d in French 95-103(1936).
Walter H. Seegers

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

L 15686-65 EWT(1)/EPR/EPA(w)-2/EPA(bb)-2 Pab-24/Pe-4 ASD-3/SSD WW/GG

ACCESSION NR: AP4047488 S/0120/64/000/005/0194/0195

AUTHOR: Abukov, A. A.; Tal'dayev, E. T.

TITLE: Vacuum lock

SOURCE: Pribory* i tekhnika eksperimenta, no. 5, 1964, 194-195

TOPIC TAGS: vacuum lock

ABSTRACT: A new type of vacuum lock is described which is intended for use in remodeling (replacing a mercury-vapor pump by an oil-vapor pump) vacuum surface-coating equipment. The lock is designed for mounting in a thick glass plate conventional in Soviet vacuum outfits. The lock operating mechanism is mounted outside the vacuum space and has a minimum number of movable parts. A detailed drawing is given and briefly explained. Orig. art. has: 1 figure.

ASSOCIATION: Gosudarstvenny*y opticheskiy institut (State Optical Institute)

SUBMITTED: 09Aug63 ENCL: 00

SUB CODE: IE NO REF SOV: 000 OTHER: 001

Card 1/1

TALDONOV, A., agronom-ekonomist

Organization and wages on viticultural state farms. Sots.trud 4 no.7:130-131 Jl '59. (MIRA 13:4)
(Crimea--Viticulture) (Wages)

TALDONOV, A., agronom

Assisgnment of work norms on state grape farms. Nauka i pered.op.v sel'khoz. 9 no.8:26-27 Ag '59.
(MIRA 12:12)

(Viticulture)

TALDYKIN, A., podpolkovnik

Antiaircraft gunners cover a crossing. Voen. vest. 41 no.5: 47-50 My '61. (MIRA 14:8)
(Stream crossing, Military) (Antiaircraft artillery)

TALDYKIN, A.M.

Shot-peening heads. Standartizatsiia 27 no.5:49 My '63.
(MIRA 16:6)

(Shot peening--Equipment and supplies)

TALDYKIN, A. I.

Taldykin, A. T. Systems of elements of a Hilbert space and series formed from them. Mat. Sbornik N.S. 29(71), 79–120 (1951). (Russian)

Let $\{\varphi_r\}$ be a sequence of elements of a Hilbert space, Φ the matrix $\|(\varphi_r, \varphi_s)\| = \|\varphi_{rs}\|$, Φ_n the $n \times n$ upper lefthand corner of Φ, $\|\varphi_n^{rs}\| = \Phi_n^{-1}$. Let λ_1^n and λ_n^n denote the lowest and highest eigenvalues of Φ_n, $\lambda_1 = \lim \lambda_1^n$, and $\lambda' = \lim \lambda_n^n$ is finite if Φ is bounded. Systems of elements are classified according to the properties of Φ; also a system is called minimal if removal of any element reduces the subspace spanned by the system. For a minimal system there exists a biorthogonal system $\{\varphi^r\}$. The unique biorthogonal system lying in the subspace $[\varphi_r]$ spanned by $\{\varphi_r\}$ is called the allied system. If $\lambda_1 > 0$ the allied system has a bounded matrix and the system is called strongly minimal. If $\lambda_1 = 0$ the system, if minimal, is called weakly minimal: this implies that 0 is not in the point spectrum of Φ.

A strongly minimal system with bounded matrix (in the operator sense) is called normal; such systems have many properties generalising those of orthonormal systems. The spaces $[\varphi_r]$ and $[\varphi^r]$ coincide. If $(f, \varphi_r) = A_r$, $(f, \varphi^r) = A^r$, and $\hat{f}$ is the projection of f on $[\varphi_r]$, then

$$\frac{1}{\lambda'}\sum|A_r|^2 \leqq \|\hat{f}\|^2 \leqq \frac{1}{\lambda_1}\sum|A_r|^2, \quad \lambda_1\sum|A^r|^2 \leqq \|\hat{f}\|^2 \leqq \lambda'\sum|A^r|^2.$$

A necessary and sufficient condition for $\{c_r\}$ to be the set of components of an element, or for $\sum c_r\varphi_r$ to be strongly convergent, is $\sum|c_r|^2 < \infty$. More generally, if $\{\varphi^r\}$ is allied to a strongly minimal system, $\sum|A^r|^2$ is convergent, and $\sum A_r\varphi^r$ converges strongly to $\hat{f}$ if $\sum|A_r|^2$ is convergent. $a_n^r = \sum\varphi_s^{rn}A_s$ is the coefficient of φ_r in the best approximation to f by a linear combination of $\varphi_1, \cdots, \varphi_n$. If $\{\varphi_r\}$ is strongly minimal, a_n^r tends weakly to A^r as $n \to \infty$; if, in particular, Φ is the matrix of a selfadjoint operator, convergence is strong. If $\{\varphi_r\}$ is strongly minimal and $\sum|\varphi_{rk}|^2 < \infty$ for all k, then $\|(\varphi^r, \varphi^s)\| = \|\varphi^{rs}\|$ is a left inverse to Φ and $\sum\varphi_{rs}A^s = A_r$ for any f. If f is such that $\sum|A_r|^2 < \infty$, then $A^r = \sum\varphi^{rs}A_s$ and, for any g, $\sum A_r(\varphi^r, g)$ converges to $(\hat{f}, g)$. Further theorems are given concerning convergence of series of these types under varying hypotheses on Φ and on the system.

J. L. B. Cooper (Cardiff).

Source: Mathematical Reviews, Vol 13 No. 3

Taldykin, A. T.

Taldykin, A. T. On the theory of linear integral equations. Mat. Sbornik N.S. 29(71), 281–312 (1951). (Russian)

The integral equations are of Fredholm type (*) $\varphi - N\varphi = f$, where $N\varphi = \int_a^b N(x, y)\varphi(y)dy$, integration being usually understood in the Riemann sense, and the kernel N being supposed of integrable square in x and y separately and in both together. In addition, the sets of right and left characteristic functions $\{\varphi_i\}$ and $\{\psi_i\}$, where $\varphi_i = \lambda_i N\varphi_i$, $\psi_i = \lambda_i N^*\psi_i$, with $N^*(x, y) = N(y, x)$, are assumed to form a pair of biorthogonal sets of one or other of the types discussed by the author previously [Mat. Sbornik N.S. 29(71), 79–120 (1951); these Rev. 13, 253]. If the sets are both normal the following assertions hold. (Ia) $\sum|\varphi_i(x)/\lambda_i|^2$, (Ib) $\sum|\psi_i(x)/\lambda_i|^2$, are convergent for all x. (II) Conversely, (Ia) implies that $\{\varphi_i\}$ are right characteristic functions of a kernel N for an integral equation in the Lebesgue sense. (III) $\sum|\lambda_k|^{-2}$ is convergent. (IV) $\sum\varphi_i(x)\varphi_i(y)/\lambda_i$ is convergent in mean with respect to x and y and with respect to x, y separately. (IV) $\sum\varphi_i(x)\psi_i(y)/\lambda_i^p$ is uniformly and absolutely convergent in both variables. (Note: though inadvertently omitted from the hypotheses, the assumption $p \geqq 3$ is necessary for the proof.) (V) If $f = Nh$, and $A^k = \int_a^b f(x)\psi_k(x)dx$, then $\sum A^k\varphi_k(x)$ is uniformly and absolutely convergent to the projection of f on the space spanned by $\{\varphi_i\}$. (VI) The series of (IV) with $p = 2$ converges absolutely and uniformly in each of the variables separately. (VII) If λ is not a characteristic value (*) has the solution $\varphi = f - \lambda\sum A^k\varphi/(\lambda - \lambda_k)$. (VIII) $f = N\varphi$ has a solution if $\sum|\lambda_k A^k|^2 < \infty$.

If only $\{\varphi_i\}$ is normal, (Ia), (III), and, under some further restrictions, (VII) hold. If the $\{\varphi_i\}$ are such that the biorthogonal series $\sum A^k\varphi_k(x)$ is convergent in mean for all f, then (V) and (VII) hold. $f = N\varphi$ for some φ if $\sum\lambda_i\bar{\lambda}_j A^i\bar{A}^j(\varphi_i, \varphi_j)$ is convergent. *J. L. B. Cooper.*

Source: Mathematical Reviews, Vol 13 No.5

TALDYKIN, A. T.

Source: Mathematical Reviews, Vol

Taldykin, A. T. On linear equations in Hilbert space. Mat. Sbornik N.S. 29(71), 529–550 (1951). (Russian)

Let A be an operator, defined in a Hilbert space H, which can be expressed in the form $A=V+B$, where V is totally continuous, B has a continuous inverse. Then $r_A=\sup\lambda$ for all λ with $\sum\lambda^n B^n$ convergent is called the Fredholm radius of A. The region in which the Fredholm theory concerning the solubility of $T_\lambda x=y$, $T_\lambda^* x=y$ $(T_\lambda=E-\lambda A)$ holds is called Ω_A, the Fredholm region; $|\lambda|<r_A$ is called the Fredholm circle, and is inside the Fredholm region. The paper is concerned with values of λ in Ω_A.

Let $\lambda S_\lambda=T_\lambda^{-1}-E$. At a pole λ_0 of S_λ, $S_\lambda=\gamma_\lambda+H_\lambda$, where $\gamma_\lambda=\sum_{k=-m}^{-1}(\lambda-\lambda_0)^k C_k$, $H_\lambda=\sum_{k=0}^{\infty}(\lambda-\lambda_0)^k C_k$. Then $\gamma_\lambda H_\mu=H_\mu\gamma_\lambda=0$, and $C_{-m}h$ is a characteristic vector of A for λ_0. The characteristic vectors of A and A^* for different λ are orthogonal. If all poles of S_λ are simple, then to each characteristic vector of A corresponds one of A^*, not orthogonal to it; and if h is orthogonal to all characteristic vectors of A^*, $h+\lambda S_\lambda h$ has no singularities in Ω_A. If $A=V+B$ where $V+B$ is a resolution of the type defined above, and such that $\|A\|>\|B\|$, and if A^*A-AA^* is semidefinite, then A has at least one characteristic value in the Fredholm circle. If all characteristic values of A are simple, and h is orthogonal to all its characteristic vectors, then $Ah=A^*h=0$. This occurs in particular if A is normal.

Green's functions in one dimension which define operators satisfying these conditions and expansions in series of the solutions of the Fredholm equation are discussed.

J. L. B. Cooper (Cardiff)

Sonu

TALDYKIN, A.T.

Taldykin, A. T. On the existence of characteristic values and on the completeness of systems of characteristic elements for linear operators. Doklady Akad. Nauk SSSR (N.S.) 92, 1121–1124 (1953). (Russian)

We say that a bounded linear operator, defined on a Hilbert space, has property CV if it has a characteristic value in its Fredholm circle. If A is such an operator, then the following conditions are sufficient, and the first is necessary, for it to have this property: 1) for some f, $\limsup \|A^n f\|^{1/n} \geqq 1/r_A$, where r_A is the Fredholm radius of A; 2) there exists a C with the property CV, and $r_A^n \|A^n f\| \geqq r_C^n \|C^n f\|$; 3) there exists B, which commutes with A, such that $C=AB$ has property CV, while $r_C\|B\| \leqq r_A$; 4) there exists B, permutable with A, such that $\|B\| \leqq M\|A\|$, $C=A+B$ has property CV, and $r_C(1+M) \leqq r_A$; 5) $A=A_1+A_2$, either $A_1A_2=0$ or $A_2A_1=0$, and the operator on the right of the zero product has property CV.

If $A=\sum_{k=-m}^{\infty}(\lambda-\lambda_0)^k c_k$, all elements of the form $c_{-k}h$ $(k=1, 2, \cdots, m)$ will be called elements corresponding to A: if $k=m$; they are characteristic elements for A.

The following conditions are sufficient (and the first is necessary) for the elements corresponding to A^* (for all λ) to form a complete set: 6) for any f in H,

$$\limsup \|A^n f\| \geqq 1/r_A;$$

7) there is a C whose corresponding elements form a complete set and, for any f, $r_A^n\|A^n f\| \geqq r_C^n\|C^n f\|$.

The hypotheses of 3), 4) and 5) give sufficient conditions for the set corresponding to A to be complete, provided that the conditions that the operators C or A_2 have the property CV are replaced by the conditions that the set corresponding to them is complete. *J. L. B. Cooper* (Cardiff).

TALDYKIN, Aleksandr Tikhonovich

(Military Red Banner Engineering Academy of Communications imeni Budennyy), Academic degree of Doctor of Physico-Mathematical Sciences, based on his defense, 28 June 1954, in the Council of the Leningrad, Order of Lenin State U imeni Zhdanov, of his dissertation entitled: "Systems and series of elements. Line Equations." Academic title of Professor. Chair: "Mathematics."

Academic degree and/or title: Doctor of Sciences and Professor

SO: Decisions of VaK, List no. 24, 26 Nov 55, Byulleten' MVO SSSR, No. 20, Oct 57, Moscow, pp 22-24, Uncl. JPRS/NY-471

TALDYKIN, A. T.

USSR/Mathematics - Linear operator eigenvalues FD-449

Card 1/1 : Pub. 64 - 1/11

Author : Taldykin, A. T. (Leningrad)

Title : Existence of eigenvalues and completeness of a system of eigenelements of certain linear operators

Periodical : Mat. sbor., 34 (76), 201-212, Mar/Apr 1954

Abstract : Treats the operator $T_\lambda = E - \lambda A$, where E is the identity operator and A is a bounded linear operator defined in a complex Hilbert space H. Cites S. M. Nikol'skiy, "Linear equations in linear normed spaces," Izv AN SSSR, seriya matem. 7, No 3 (1943), 147-163, and A. I. Plesner and V. A. Roklin, "Spectral theory of linear operators II" Uspekhi matem. nauk, Vol I, No 11 (1) (1946), 71-191.

Institution :

Submitted : November 1952

USSR/Mathematics - Topology

Card 1/1 Pub. 22 - 6/23

Authors : Taldykin, A.T. Aleksandr Tikhonovich (Dr. Physico-Math Sci.)

Title : Regarding the problem on the existence of eigen values of linear operators

Periodical : Dok. AN SSSR 99/6, 905-908, Dec 21, 1954

Abstract : A series of theorems is presented proving the existence of eigen values for linear operators of the AB and BA types, where $A = C\ C_1$ ..... and C, C_1 ..... are limited linear operators. The proof is obtained in the light of the theory of Fredholm's circle in the Thebert space. One USSR reference (1953).

Institution: ..... Chair Mathematics, Leningrad State Univ imeni Zhdanov

Presented by: Academician A.N. Kolmogorov, September 22, 1954

16(1)

06321
SOV/140-59-6-22/29

AUTHOR: Taldykin, A.T.

TITLE: Systems and Series of Elements With Unbounded Gram Matrices

PERIODICAL: Izvestiya vysshikh uchebnych zavedeniy. Matematika, 1959, Nr 6, pp 174-188 (USSR)

ABSTRACT: The author considers systems

(1) $\{\varphi_i\}$, $i=1,2,\ldots,$

of elements of a Hilbert space H, series developments with respect to these systems of elements and other connected questions. The investigation essentially bases on the properties of the Gram matrix

(2) $\Phi = \|\varphi_{ik}\|$, $\varphi_{ik} = (\varphi_i, \varphi_k)$ $(i, k = 1, 2, \ldots)$

of the system (1) and the operator defined by it. The results generalize the case already treated by the author [Ref 8], where the Gram matrix is bounded.
There are 11 references, 7 of which are Soviet, 3 German, and 1 Hungarian.

SUBMITTED: June 24, 1958

Card 1/1

TALDYKIN, A.T. (Leningrad)

Eigenvalues and adjoint elements of linear operators. Zhur. vych. mat. i mat. fiz. 2 no.1:165-169 Ja-F '62. (MIRA 15:3)
(Eigenvalues) (Operators (Mathematics))

GORINSHTEYN, L.L., kand. tekhn. nauk; ZAV'YALOV, V.A., kand. tekhn. nauk; NEMOLVIN, N.S., inzh.; TALDYKIN, B.S.

Complex improvements and automatic control of technological operations at the peat-briquet plant. Torf. prom. 36 no.7:11-16 '59. (MIRA 13:3)

1.Kalininskiy torfyanoy institut (for Gorinshteyn, Zav'yalov).
2.Tatishchevskoye torfopredpriyatiye (for Nemolvin, Taldykin).
(Peat industry--Equipment and supplies) (Briquets (Fuel))

LOKSHIN, V.A., kandidat tekhnicheskikh nauk; TALDYKIN, K.M., inzhener.

Operational inspection of cleaning heating surfaces of furnaces by steam-blast. Elek.sta. 24 no.12:16-20 D '53. (MLRA 6:12)
(Furnaces)

LOKSHIN, V.A., kand.tekhn.nauk; MOISEYEV, G.I., inzh.; PAVLENKO, L.I., inzh.; TALDYKIN, K.M., inzh.; VARICHEV, V.A., inzh.

Thermal conditions during the operation of high-pressure radiation wall-type superheaters. Elek.sta. 30 no.1:21-26 Ja '59. (MIRA 12:3)

(Superheaters)

LOKSHIN, V.A., kand. tekhn. nauk; TALDYKIN, K.M., inzh.

Temperatures in the strengtheners of boilers. Elek sta. 30 no.2:78 F '59. (MIRA 12:3)

(Boilers)

LOKSHIN, V.A., kand.tekhn.nauk; PAVLENKO, L.I., inzh.; TALDYKIN, K.M., inzh.

Thermal characteristics of radiation-convectional steam superheaters. Energomashinostroenie 7 no.5:7-9 My '61. (MIRA 14:8)

(Superheaters)

LOKSHIN, V.A., kand.tekhn.nauk; PAVLENKO, L.I., inzh.; TALDYKIN, K.N., inzh.; TARAVKOV, S.S., inzh.

Temperature conditions in the operation of air preheaters with a high degree of air heating. Elek.sta. 32 no.4:24-28 Ap '61. (MIRA 14:7)

(Air preheaters)

LOKSHIN, V.A., kand. tekhn. nauk; TAIPYKIN, K.M., inzh.

Increase in the reliability of high-pressure feedwater economizers. (MIRA 17:11)
Elek. sta. 35 no.7:6-16 Jl '64.

ALEKSEYEV, V.S.; BILYUGA, T.G.; TALDYKIN, O.Ye.; OLEKSANDRUK, A.M.; TIMOSHENKO, A.G.; MALUKHA, N.N.; MINKO, A.F.; SHABEL'NYUK, V.S.; GIRENKO, P.P.; MAZENKO, V.V.

Amount of alkaloids of the 1-methylpyrrolizidone series in the groundsel Senecio borysthenicus Andz. during different vegetation periods and the effect of mowing upon the alkaloid content of the aftergrowth. Nauch. dokl. vys. shkoly; biol. nauki no.2: 152-154 '62. (MIRA 15:5)

1. Rekomendovana kafedroy farmatsevticheskoy khimii Dnepropetrovskogo meditsinskogo instituta.
(SENECIO) (PYRROLIZINE)

ALEKSEYEV, V.S. [Aleksieiev, V.S.]; BILYUGA, T.G. [Biliuha, T.H.], student; TALDYKIN, O.Ye., student

Alkaloids from the 1-methylprrolizidine series. Report No.5: Alkaloids from dusty miller (Senecio cineraria DC.= Cineraria maritima) family Compositae. Farmatsev. zhur. 17 no.1:42-45 '62. (MIRA 15:6)

1. Kafedra farmatsevticheskoy khimii Dnepropetrovskogo meditsinskogo instituta, zaveduyushchiy kafedroy dotsent Kurinna, N.V.
(SENECIO) (ALKALOIDS) (HELIOTRIDANE)

TALDYKIN, P.

Economic discussions in the shop. Sov. profsoiuzy 5 no.5:24-25 My '57.
(Dnepropetrovsk--Pipe, Steel) (MLRA 10:6)

TAIDYKIN, S. I.

Age relations of spessartites to the lead-zinc ores of the Arguna fields in Eastern Trans Baikal. S. I. Taldykin. *Doklady Akad. Nauk S.S.S.R.* 95, 629-30(1954).—The polymetallic mineralization especially in the Zapokrovsk, Kadainsk, and neighboring deposits is of doubtful geol. age and genesis. It is often ascribed to a Post-Jurassic magmatic activity; other investigators have assumed a younger age. For a decision the interrelations between lamprophyric dikes, and of spessartite rocks of the Kadainsk deposits with the productive Pb-Zn ores are particularly important. The spessartite forms veinlets and thin dikes which have undergone the same tectonic disturbances as the ores. Direct evidence from the mining horizons has shown that the spessartite veins must have intruded into the ores, between the formation of the Zn ores, and that of the Pb ores. This fact, however, does not fix accurately enough the time of their formation. It is only sure that the rocks and the ores must have originated from the same source. The spessartite is often brecciated and occurs amidst the massive galena ore. On the other hand, black monomineralic sphalerite lumps or PbS-ZnS ore occurs included in the silicate rock. Irregular smaller patches and lumps of the spessartite occur in the massive or banded "chipmunk" ores. W. Eitel

KRISHTOFOVICH, A.N., redaktor [deceased] SPIZHARSKIY, T.N., redaktor; BELYAYEVSKIY, N.A., redaktor; VADRANYANTS, L.A., redaktor; ZAITSEV, I.K., redaktor; KRASNOV, I.I., redaktor; KULIKOV, M.V. redaktor; LABAZIN, G.S., redaktor; LIBROVICH, L.S., redaktor; LUR'YE, M.L., redaktor; MALINOVSKIY, F.M., redaktor; NESTEROV, L.Ya., redaktor; NEKHOROSHEV, V.P., redaktor; SERGIYEVSKIY, V.M redaktor; TALDYKIN, S.I., redaktor; KHABAKOV, A.V., redaktor; SHABAROV, N.V., redaktor; SKVORTSOV, V.P., redaktor; KISELEVA, A.A., tekhnicheskiy redaktor GUROVA, O.A., tekhnicheskiy redaktor.

[Geological dictionary] Geologicheskii slovar'. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr.Vol.1 A-L 1955.402 p. (MLRA 8:10)
(Geology--Dictionaries)

TALDYKIN, S. I.

5

4E2c

Concerning the improved construction of an electromagnet for separation of single-mineral fractions. R. Ya. Bindul, V. P. Ivanova, and S. I. Taldykin. *Vsesoyuz. Nauch.-Issledovatel. Geol. Inst. Informatsiya. Sbornik* 1955, No. 1, 145-6.—An announcement of the construction of an electromagnet with a powerful, closely adjustable field is made. The app. is based on a previous model, and a general listing of improvements, mainly instrumentation, is given. The app. is used for analysis and sepn. of minerals in ores and mixts, on the basis of differences in magnetic susceptibility. R. F. A.

18

VOZNESENSKIY, D.V.; AMELANDOV, A.S.; GEYSLER, A.N.; GOLUBYATNIKOV, V.D.; [deceased]; DOMAREV, V.S.; DOMINIKOVSKIY, V.N.; DOVZHIKOV, A.Ye.; ZAYTSEV, I.K.; IVANOV, A.A.; ITSIKSON, M.I.; IZOKH, E.P., KNYAZEV, I.I.; KORZHENEVSKAYA, A.S.; MISHAREV, D.T.; SEMENOV, A.I.; MOROZENKO, N.K.; NEFEDOV, Ye.I.; RADCHENKO, G.P.; SERGIYEVSKIY, V.M.; SOLOV'YEV, A.T.; TALDYKIN, S.I.; UNKSOV, V.A.; KHABAKOV, A.V.; TSEKHOMSKIY, A.M.; CHUPILIN, I.I.; SHATALOV, Ye.T., glavnyy redaktor; KRASNIKOV, V.I., redaktor; MIRLIN, G.A., redaktor; RUSANOV, B.S, redaktor; POTAPOV, V.S., redaktor izdatel'stva; GUROVA, O.A., tekhnicheskiy redaktor.

[Instructions for organization and execution of geological surveys in scales of 1:50,000 and 1:25,000] Instruktsiia po organizatsii i proizvodstvu geologo-s"emochnykh rabot masshtabov 1:50,000 i 1:25,000. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. 1956. 373 p. (MLRA 10:6)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr. (Geological surveys)

TALDYKIN, S.I.

Classification of magmatic deposits. Vest. LGU 12 no.18:5-13 '57.
(Rock, Igneous--Classification) (MIRA 11:3)

TALDYKIN, S. I.

Initial vertical zoning in hydrothermal deposits. Nauch.dokl. vys.shkoly; geol.-geog.nauki no.1:188-194 '59.(MIRA 12:6)

1. Leningradskiy universitet, geologicheskiy fakul'tet, kafedra poleznykh iskopayemykh.
(Ore deposits)

SIDEL'NIKOVA, Ye.A.; TALDYKIN, Ye.M.

Change of the chemical composition of underground waters in the Voronezh region. Razved. i okh. nedr 31 no.7:46-49 Jl '65. (MIRA 18:11)

1. Gidrogeologicheskaya stantsiya TSentral'no-chernozemnoy polosy.

TALDYKINA, K.S.

Stellerite from the ore deposits Savinskoe No. 5 in Eastern Transbaikalia. K. S. Taldykina (State Univ., Leningrad). *Zapiski Vsesoyuz. Mineral. Obshchestva* 87, 106-8 (1958).—The polymetallic deposits of Savinskoe occur in diorite and quartz-graphite schists, in veins with calcite and zeolites as fillers. Stellerite is the characteristic zeolite of these veins, grown on their walls in dense acicular aggregates. The central portions of the veins are filled with granular calcite and water-clear quartz. The crystals of stellerite are up to 2 mm. in length, with the forms [100] [010] [001] [111], often tabular parallel (010). Cleavage is (010) perfect, and (100) imperfect. The color is yellowish, also greenish by chlorite inclusions on the cleavage cracks. Elongation is neg.; $\gamma = 1.495$ and $\alpha = 1.486$; $2V = -44°$; d. 2.141. Chem. analysis corresponds to the formula $CaO \cdot Al_2O_3 \cdot 6.5SiO_2 \cdot 7H_2O$. W. Eitel

Distr: 1E2c

TALDYKINA, K.S.

Quartz-axinite veins from basic rocks of Pechenga District. Mat.po min.Kol'.poluost. 1:25-29 '59. (MIRA 15:2)
(Pechenga District--Axinite) (Pechenga District--Quartz)

TALDYKINA, K.S.

Minerogenetic phases in the Savinskoye no.5 complex metal deposit
Vest.LGU 14 no.6:38-47 '59. (MIRA 12:6)
(Transbaikalia--Mineralogy)

TALDYKIN, K. S., Cand Geol-Min -- (diss) "Mineralogy of the polymetallic deposits in the Klichkinskiy Group in Eastern Transbaikalia -- Savinskiy No 5, Pochekuyevskiy and Klichkinskiy." Leningrad, 1960. 16 pp; 1 page of tables; (Leningrad Order of Lenin State Univ im A. A. Zhdanov); 225 copies; price not given; (KL, 19-60, 131)

TALDYKINA, K.S.

Axinite from the No.5 Savinskoye deposit in eastern Transbaikalia. Zap.Vses.min.ob-va 89 no.2:227-231 '60. (MIRA 13:7)

1. Kafedra mineralogii Leningradskogo universiteta.
(Savinskoye region (Transbaikalia)--Axinite)

ISKYUL', Nadezhda Vladimirovna; TALDYKINA, Kira Sergeyevna; KUZNETSOV, S.S., doktor geol.-miner. nauk, otv. red.; SHENGER, I.A., red. izd-va; GALIGANOVA, L.M., tekhn. red.

[Guidebook for the A.P.Karpinskii Geological Museum of the Academy of Sciences of the U.S.S.R.; history of the earth and life]Putevoditel' po Geologicheskomu muzeiu im. A.P.Karpinskogo AN SSSR; istoriia Zemli i zhizni. Moskva, Izd-vo Akad. nauk SSSR, 1962. 95 p. (MIRA 16:1)
(Leningrad--Geological museums)

TALDYKINA, Kira Sergeyevna; KUZNETSOV, S. S., prof., otv. red.; CHUZHOV, A. A., red. izd-va; GALIGANOVA, L. M., tekhn. red.

[Mineralogy of complex metal deposits of the Klichka group in eastern Transbaikalia (Savva No. 5, Pochekuyevo, and Klichka).] Mineralogii polimetallicheskikh mestorozhenii Klichkinskoi gruppy Vostochnogo zabaikal'ia (Savinskoe No. 5, Pochekuevskoe i Klichkinskoe). Moskva, Izd-vo. Akad. nauk SSSR, 1962. 120 p. (Akademiia nauk SSSR. Geologicheskii muzei. Trudy, no.10). (MIRA 15:10)

(Transbaikalia--Ore deposits)

VEBER, V.V., professor; GINZBURG-KARAGICHEVA, T.L.; GLEBOVSKAYA, Ye.A.; GORSKAYA, A.I.; ZAKHAROV, A.A.; MANUCHAROVA, Ye.A.[deceased]; MEKHTIYEVA, V.L.; ROMM, I.I.; SAVICH, V.G.; TALDYKINA, N.N., FOKINA, N.I.; YURKEVICH, I.A.; MIRCHINK, M.F., professor, redaktor; L'VOVA, L.A., redaktor; TROFIMOV, A.V., tekhnicheskiy redaktor.

[Accumulation and transformation of organic substances in recent sea sediments; in the light of the problem of oil origin] Nakoplenie i preobrazovanie organicheskogo veshchestva v sovremennykh morskikh osadkakh; v aspekte problemy proiskhozhdeniia nefti. Sbornik statei pod red. M.F.Mirchink. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1956. 342 p. (MLRA 9:6)

1.Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy institut.
2. Chlen korrespondent AN SSSR (for Mirchink)
(Sapropelites) (Marine biology) (Petroleum geology)

TALDYKINA, N. N.

2

Microflora and the redistribution of organic matter. T. L. Ginzburg-Karagicheva and N. N. Taldykina. *Nakoplenie i Preobrazovanie Org. Veshchestva v Sovremen. Morskikh. Osadkakh, Vsesoyuz. Nauch.-Issledovatel. Geol.-Razvedoch. Neft. Inst.* 1956, 84-6.—Expts. with redistribution in which the upper sample in a test cylinder was composed of decompg. marine org. matter, while the bottom layer was composed of typical inorg. mineral materials were followed with biol. examn. In general the bacterial count tends to rise with increased depth of a sample of sand substructure; in aleurite the bacterial count is min. in the mid-section and is generally below that found in sand. In clay material the distribution is analogous to that found in sand.

G. M. Kosolapoff

L 26662-66 EWT(1)/EWT(m) IJP(c) JD/JG

ACC NR: AT6010461 SOURCE CODE: UR/3119/65/000/003/0115/0132

AUTHOR: Tale, A. K.

ORG: none

54
52
B+1

TITLE: Intracenter luminescence of the CsI-In crystal

SOURCE: AN LatSSR. Institut fiziki. Radiatsionnaya fizika, no. 3, 1965. Ionyye kristally (Ionic crystals), 115-132

TOPIC TAGS: cesium compound, iodide, activated crystal, luminescence, temperature dependence, scintillator, excited state, optic transition

ABSTRACT: To determine the mechanism of intracenter luminescence of the CsI-In crystal, the author has investigated the temperal and spectral characteristics of its luminescence as a function of the temperature. Measurements were made under both stationary and pulsed conditions at 80 and 300K, and in addition the temperature dependence of the damping time and of the form of the photoscintillations of the crystal were measured. The procedure consisted of obtaining oscillographs of single photoscintillations produced by excitation of the crystal with short light pulses ($\sim 10^{-8}$ sec). The spectral distribution of the scintillations was investigated with a monochromator, and the excitation spectrum with

Card 1/2

L 26662-66

ACC NR: AT6010461 2

the monochromator of a spectrophotometer. The scintillations were recorded with a photomultiplier and an oscilloscope. At room temperature, the emission spectrum consists of a single broad band at 554 nm. At 86K the peak shifts to 560 nm. An additional emission band at 448 nm appears at 80K. The nature of this band, and especially its relation to the radiative transitions in the In^+ ion, is discussed from the point of view of the various transitions that can take place in the system. The results point to the conclusion that in the excited state the In^+ center has two levels $^3P_1^{(1)}$ and $^3P_1^{(2)}$, and their presence determines all the emission properties of the CsI-In crystal. The author thanks I. K. Plyavin' for guidance of the work and Z. L. Morgenshtern for supplying the crystal. Orig. art. has 7 figures and 2 formulas.

SUB CODE: 20/ ORIG REF: 014/ SUBM. DATE: 00

Card 2/2 BLG

[illegible] A. A.

[illegible] Institute of Physics AN Latvian (Institut fiziki AN Latviiskoy)

[illegible] Mechanism of luminescence of the crystal KI-In

[illegible]: AN Latv.SSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 3, 1966, [illegible]

[illegible]: luminescence center, potassium compound, activated crystal, optic transition, line absorption, temperature dependence

[illegible]: The article is devoted to an evaluation of the experimental data reported by the author in an earlier paper (Izv. AN Latviiskoy SSR ser. fiz. i tekhn. nauk, 1965, 6, 3) and presented on their basis certain assumptions concerning the nature and relative positions of the energy levels in the In^+ excited ion in KI-In, and also determines the probabilities of spontaneous transitions from these levels to the ground level of the In^+ in KI. It is demonstrated that all the experimental data agree with the assumption that the level $^3P_1$ of the In^+ is split and that each sub-band of the long-wave absorption doublet corresponds to the transitions $^1S_0 \rightarrow {}^3P_1^{(2)}$ and $^1S_0 \rightarrow {}^3P_1^{(1)}$, while the luminescence bands at 493 and 571 nm correspond to the inverse transitions $^3P_1^{(2)} \rightarrow {}^1S_0$ and $^3P_1^{(1)} \rightarrow {}^1S_0$ respectively. The temperature variations of the maxima of these

Card 1/2

ACC NR: AP6027891

Absorption and luminescence bands indicate that the splitting of the $^3P_1$ level of the Mn^{2+} ion is due to the Jahn-Teller effect. The author thanks I. K. Plyavin' for direction of the work. Orig. art. has: 2 figures and 5 formulas

SUB CODE: 20/ SUBM DATE: 30Jun65/ ORIG REF: 010/ OTH REF: 002

L 34981-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6010813 SOURCE CODE: UR/0371/65/000/006/0003/0010

AUTHOR: Tale, A. K.

ORG: Institute of Physics, AN LatSSR (Institut fiziki AN LatSSR)

TITLE: Investigation of the intracenter luminescence of KI-In. I.

SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 6, 1965, 3-10

TOPIC TAGS: potassium compound, luminescence, luminescence center, activated crystal, absorption band, scintillation, temperature dependence, LUMINESCENCE SPECTRUM, EXCITATION SPECTRUM

ABSTRACT: The purpose of the investigation was to check on the assumption that long-wave bands of activator absorption of KI-In correspond to transitions from the $^1S_0$ state to components of the split $^3P_1$ level, by verifying whether two luminescence bands corresponding to inverse transition to the ground state $^1S_0$ of the In^+ level actually exist, inasmuch as so far one of the bands, at 571 nm, has been experimentally observed. To this end, a study was made of the form of the photoscintillations of KI-In by determining in the luminescence spectrum at different crystal temperatures, the spectrum of excitation of individual bands under pulsed excitation, the luminescence and excitation spectrum in the stationary mode, and also the absorption spectrum at different crystal temperatures from 80 to 300K. The experiments were carried out by obtaining oscillograph traces of single photoscintillations excited by short-duration light pulses from a condensed spark discharge. The test experimental setup and procedure are briefly described. The results disclosed the presence of a short

Card 1/2

L 34981-66

ACC NR: AP6016813

(non-equilibrium) and a long (equilibrium) component in the photoscintillation. The spectral distribution of the short component forms the expected 453 nm luminescence band (88K), while that of the long component the already known 571 nm luminescence band (592 nm at 88K). Both components are excited in the activator absorption bands of KI-In. With decreasing temperature, the difference in the positions of the maxima of the luminescence bands of KI-In increases, while the difference between the maxima of the bands in the long-wave absorption doublet decreases. In addition, a short-wave luminescence band was observed (453 nm at 88K), which is attributed to $^3P_1 - {}^1S_0$ transitions in the In^+ ion and is the analog of short-wave luminescence bands of alkali-halide crystals activated with thallium. Orig. art. has: 5 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 04Mar65/ ORIG REF: 016/ OTH REF: 001

Card 2/2

ACC NR: AP7001327 SOURCE CODE: UR/0371/66/000/005/0015/0019

AUTHOR: Chernyak, V. G. — Cernaks, V.; Dunina, A. A. — Dunina, A.; Larionov, M. G. — Larionovs, M.; Plyavinya, I. K. — Plavina, I.; Shamovskiy, L. M. — Samovskis, L.; Tale, A. K. — Tale, A.

ORG: Physics Institute AN LatSSR (Institut fiziki AN Latv. SSR)

TITLE: Photoscintillations of KCl-Tl excited in the F-band

SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 5, 1966, 15-19

TOPIC TAGS: scintillation, light excitation, excitation spectrum, f band

ABSTRACT: An investigation was made of the rapid transfer of energy from F-centers to activator centers and of the time necessary for such transfer when the crystals are subjected to pulsed excitation. The investigation was based on the comparison of the kinetics of activator luminescence excited directly in the center of luminescence (Tl-scintillation) and in the F-absorption band (F-scintillation). KCl-Tl-F crystals (0.2 or 0.5 mol% Tl in melt) were irradiated with x- or gamma rays. The concentration of F-centers did not exceed 5×10^{17} cm^{-3}. The crystals were placed in a metallic cryostat and excited with light pulses ($\sim 10^{-7}$ sec) from a spark. The excitation was applied alternately in the 247 and 560 nm bands. A coincidence was found between F-scintillation and Tl-scintillation with regard to their time

Card 1/2

ACC NR: AP7001327

characteristics in the range from room temperature to the temperature of liquid nitrogen. The time characterizing the slow exponential decay τ_{LC} (LC-long component) in F-scintillations changed from 2.5×10^{-7} sec to 5×10^{-5} sec with a change in temperature from 300 to 80K. At low temperatures, a sharp emission (short component-SC) of luminescence occurs which describes the form of the exciting spark pulse, as in the case of Tl-scintillation. The ratio of quantum yield of SC and LC of F-scintillation is the same as for Tl-scintillation in the entire range of measured temperatures, which shows that the overpopulation of the $^3P_1$ level with respect to the $^3P_0$ level at F-scintillation is the same as in the case of Tl-scintillation. The SC and LC of luminescence in F-scintillations relate to the activator luminescence of KCl-Tl, i.e., to the 305 nm band, but not to the 335 nm band, which corresponds to the hole centers. The maxima of the excitation spectra of F-scintillation and absorption spectra coincide and are in the region of 560 ± 5 nm. From the experimental results, it follows that the mechanism of F-scintillation formation is of the electron type. This means that during short-time crystal excitation in the F-absorption band, free electrons, which are generated in the conductivity zone, recombine with holes, which are localized due to x- or gamma-irradiation on the activator ion or close to it. This process is accompanied by the excitation of the activator. Orig. art. has: 2 figures. [JA]

SUB CODE: 20/ SUBM DATE: 06Dec65/ ORIG REF: 007/ ATD PRESS: 5109

Card 2/2

20834

9,4160 (3201, 2804 only)
24,3500 (1137, 1138, 1395)

S/048/61/025/003/022/047
B104/B214

AUTHORS: Vitol, I. K. and Tale, I. A.

TITLE: Investigation of the photoelectric polarization of the crystal phosphors on the basis of ZnS

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 3, 1961, 368-369

TEXT: This paper was read at the Ninth Conference on Luminescence (Crystal Phosphors) held in Kiyev from June 20 to June 25, 1960. For the study of the mechanism of recombination processes in crystal phosphors it is expedient to apply, in addition to optical methods of investigation, also electrical methods which permit an immediate determination of the sign of the excited carriers. On certain assumptions, a study of the photoelectric polarization can furnish not only the sign of the carriers but can also give the ratio of the electron and hole components in mixed conductivity. The surface condition strongly affects the crystal photo-effect in semiconductors. The existence of surface levels affects also the amount and sign of the experimentally measured photoelectric polarization

Card 1/4

of the crystal phosphors. However, a number of experimental facts show that on account of the specific properties of crystal phosphors and under certain conditions (excited conductivity much larger than equilibrium conductivity) the surface levels have no effect on the sign and amount of photoelectric polarization. In the region of fundamental absorption of ZnS phosphors activated by Cu, Ag, and Mn, light excites an n-type conductivity. The p-type conductivity at room temperature lies within the limits of the experimental error, that is, within less than 5% of the total conductivity. If a ZnS-Cu crystal is exposed to light of wavelength 312 mμ, the photoelectric polarization reaches a constant value of the potential difference. On exposure to light in the **range** of wavelengths 350 - 1150 mμ, there occurs, along with the extinction of luminescence, a decrease of the photoelectric polarization to φ_n. The dependence of φ_n and φ_{nu} on the wavelength of the light is shown graphically in Fig. 1. This figure also gives the intensity of luminescence $\Delta I/I$ and the additional absorption $\Delta D/D$ according to data of V. V. Antonov-Romanovskiy (Ref. 7: Antonov-Romanovskiy V. V., Shchukin I. P., Dokl. AN SSSR, 71, 2 (1950)) as functions of the wavelength. The decrease of the photoelectric polarization in the range of 500-800 mμ can be explained as due

to the following two causes: 1) The infrared light sets the holes free, which combine with the localized electrons, and so the electron concentration in the conduction band is decreased. 2) The infrared light sets the holes free, and the photoelectric polarization decreases on account of the diffusion of the holes to the unexposed surface of the specimen. The absence of decrease of the photoelectric polarization above 1,150 mμ shows that the extinction of luminescence in this range differs from that in the range 500-800 mμ. Ch. B. Lushchik is thanked for interest and discussions. There are 1 figure and 7 Soviet-bloc references.

Legend to Fig. 1:
Dependence of the photoelectric polarization of the low-inertia component φ_n and the inertia component φ_{nu}, and of the relative decrease $\Delta I/I$ of luminescence on the wavelength of irradiation for a ZnS-Cu phosphor under constant excitation with light of wavelength 312 mμ.

L 19663-63 EWT(1)/EWP(q)/EWT(m)/EWP(B)/BDS AFFTC/ASD/ESD-3/
IJP(C) JD/JG

ACCESSION NR: AR3006991 S/0058/63/000/008/E056/E057

SOURCE: RZh. Fizika, Abs. 8E396

AUTHOR: Tale, I. A.

TITLE: Possibility of determining the sign of charge carriers by investigating the anisotropic electric conductivity of the contact between a metal and alkali halide crystal

CITED SOURCE: Sb. Fiz. shchelochnogaloidn. kristallov, Riga, 1962, 381-384

TOPIC TAGS: space charge, metal-crystal contact, alkali halide crystal , carrier distribution

TRANSLATION: Assuming the theory of physical contact for semiconductors to be valid also for the contact between a metal and a material with a broad forbidden band, the author proposes a method for

Card 1/2

L 19663-63

ACCESSION NR: AR3006991

determining the sign of the excited charge carriers from the distribution of the space charge in the regions near the electrodes. In the case of electron type conductivity, a positive space charge is expected near the cathode, while for hole conductivity negative space charge is expected near the anode; both cause redistribution of the potentials in the crystal. The vibrating-probe method is used to measure the potential distribution. It is established that in KCl exposed to X-rays light in the F band excites electron conductivity. In the case of linear heating at a rate of 0.2°C/sec in KCl exposed to X-rays four regions were observed, with different character of space-charge variation -- two with formation of positive charge at the cathode and two with negative charge produced in the near-anode region of the crystal. A. Poletayev.

DATE ACQ: 06Sep63 SUB CODE: PH ENCL: 00

Card 2/2

ACC NR: AP7005004 SOURCE CODE: UR/0048/66/030/009/1560/1562

AUTHOR: Tale,I.A.; Bogan,Ya.R.; Bomika,V.A.; Vitol, I.K.

ORG: none

TITLE: Concerning the mechanism of recombination processes in zinc sulfide /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.30, no.9, 1966, 1560-1562

TOPIC TAGS: photoconductivity, zinc sulfide, irradiation, hole conduction, electron conduction

ABSTRACT: The authors have investigated the infrared-stimulated photoconductivity in different ZnS crystals, determining the sign of the carriers by means of Hall effect and photoelectric polarization measurements. The investigated specimens fell into two main groups: high-resistivity crystals, and low-resistivity ZnS crystals containing an excess of Zn, whose high equilibrium conductivity was due to the presence of a high concentration of lattice microdefects. None of the specimens exhibited thermal hysteresis of the electric conductivity, and their luminescence yields were very low. After excitation in the fundamental absorption band, photoconductivity could be stimulated in specimens of both types by irradiation in any of four bands peaking at 0.95, 1.6, 2.0, and 2.8 eV. In the low-resistivity specimens the photo-

Card 1/2

ACC NR: AP7005004

current was carried by electrons regardless of the wavelength of the stimulating photons; in the high-resistivity specimens the photocurrents stimulated in the 0.95 and 2.8 eV band were carried by electrons, and those stimulated in the 1.6 and 2.0 eV bands were carried by holes. Moreover, de-excitation of the high resistivity crystals in the 0.95 eV band reduced the photosensitivity in the 1.6 and 2.0 eV bands, de-excitation in the 1.6 or 2.0 eV bands reduced the photosensitivity in the 0.95 eV band, irradiation in the 2.8 eV band restored the photosensitivity in the other three bands. Cooling from room temperature to liquid nitrogen temperature destroyed the photosensitivity of the 1.6 and 2.0 eV bands; the photosensitivity could be restored only by further excitation in the fundamental absorption band. It is concluded that the 1.6 and 2.0 eV bands are not simple; stimulation in these bands excites trapping centers of several different kinds, of which some have excited states in the forbidden gap. Sensitivity in the 2.8 eV band appeared in specimens that exhibited a green luminescence; the authors accordingly associate this band with an activator. The photoconductivity stimulated in the 2.8 eV band at room temperature had both electron and hole components; the holes were not revealed by the Hall effect measurements because of their low mobility. Orig. art. has: 2 figures.

SUB CODE: 20 SUBM DATE: none ORIG. REF: 003

Card 2/2

WITWICKI, Tadeusz; TALEJKO, Eugeniusz; MADRZYCKI, Tadeusz; MATERSKA, Maria; MATUSEWICZ, Czeslaw; EYSYMONTTOWA, Maria; TYSZKOWA, Maria; STRABURZYNSKA, Teresa; TYSZKA, Zbigniew; WYSOCKA, Ludwika; STACHOWSKI, Ryszard; RADWILOWICZ, Ryszard; HORNOWSKI, Boleslaw; SEDLAK, Jiri

New books. Przegl psychol no.8:123-185 '64.

TALEJKO, Eugeniusz, mgr.

"Machine and humanism. The human problem in the industrialized civilization" by Georges Friedmann. Reviewed by Eugeniusz Talejko. Przegl techn no.34:6 24 Ag '60.

TALEJKO, E., mgr.

Adapting machines to men. Ekon org pracy 13 no.1:36-37 '62.

TALEJKO, Eugeniusz, mgr

"Engineering psychology" by J. Okon, L. Paluszkiewicz.
Reviewed by Eugeniusz Talejko. Przegl techn 84 no.47:7 24 N '63.

USSR / General and Special Zoology. Insects F

Abs Jour: Ref Zhur-Biol., No 4, 1958, 16465

Author : Talenga N. A., Zhigayev G.N.
Inst : Institute of Entomology and Phytopathology Academy of Sciences Ukrainian Soviet Socialist Republic.
Title : The Pre-sowing Treatment of Sugar-Beet Seeds with a 12% Hexachlorane Dust in the Control of Beet Weevils. (O predposevnoi obrabotke semyan sakharnoi svekly 12%-nym dustom heksakhlorana dlya bor'by so sveklovichnym dolgonosikom)

Orig Pub: Nauchn. tr. Instituta entomol.i fitopatol. AN USSR, 1956,7. 88-95.

Abstract: In production experiments the treatment of the seeds with a suspension of 12% dust of hexachlorane (6 kg/c and 70 lit/c of water) and dusting with a pulverised technical hexachlorane were equal in value as to the weevil's paralysis, but the

Card 1/3

USSR / General and Special Zoology. Insects F

Abs Jour: Ref Zhur-Biol., No 4, 1958, 16465

Abstract: weevils when dusted died sooner, and the young crop was less damaged. The treatment of the seeds with a suspension of technical hexachlorane (1kg/c and 17 lit/c of water) was considerably less effective than dusting with the same preparation. The beet sprouts from seeds treated with a 12% dust of hexachlorane appeared simultaneously with those of the control plants. On the fourth day of the appearance of the sprouts 82.8% of the insects died at the initial sowing and 94.7% died in the second sowing. The toxicity in the sprouts in the first case lasted 6-7 days and in the second case only 4-5 days (due to high temperature at the beginning of June). In spite of the shortness of the period of the sprouts toxicity, the protective planting played a big role, pre-

Card 2/3

165.
(MIRA 18:8)

TALENSKIY, O. N.

Dissertation: "On the Photoelectric Method of Determining Heat-Radiation Capacity of Liquid Metal." Cand Tech Sci, Inst of Metallurgy Imeni A. A. Baykov, Acad Sci USSR, 29 Apr 54. (Vechernyaya Moskva--Moscow, 20 Apr 54)

SO: SUM 243, 19 Oct 1954

PHASE I BOOK EXPLOITATION SOV/4558
SOV/16-5-5

Akademiya nauk SSSR. Institut metallurgii

Metallurgiya, metallovedeniye, fiziko-khimicheskiye metody issledovaniya (Physicochemical Research Methods in Metallurgy and Metal Science) Moscow, Izd-vo AN SSSR, 1960. 281 p. (Series: Its: Trudy, vyp. 5) Errata slip inserted. 2,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A.A. Baykova.

Resp. Ed.: I.P. Bardin, Academician (Deceased); Ed. of Publishing House: V.A. Klimov; Tech. Ed.: T.P. Polenova.

PURPOSE: This collection of articles is intended for metallurgists and metal researchers.

COVERAGE: The collection contains articles on metallurgy, metal science, and physicochemical research methods. Separate articles discuss the structure and properties of some metals and alloys. The effect of cold treatment and inclusions on the properties of alloys are analyzed, and instruments and

Card 6/7

SVET, D.Ya.; TALENSKIY, O.N.

Photoelectric method and testing equipment for the determination of the radiating properties of liquid metals. Trudy Inst.met. no.5: 183-188 '60. (MIRA 13:6)

(Liquid metals--Thermal properties)
(Pyrometry)
(Photoelectric measurements)

TALENSKIY, O.N., kand. tekn. nauk, red.; KHIDEKEL', I.Ya., red.; REZOUKHOVA, A.G., tekhn. red.

[Research organization in the industry of the U.S.A.] Organizatsiia nauchnykh issledovanii v promyshlennosti SShA. Pod red. O.N.Talenskogo. Moskva, Izd-vo inostr. lit-ry, 1962. 314 p. Translated from the English. (MIRA 16:9)
(United States--Research, Industrial)

ACCESSION NR: AP4033096 S/0120/64/000/002/0005/0016

AUTHOR: Karpov, Yu. A.; Kontor, Ye. I.; Talenskiy, O. N.

TITLE: Magnetic-discharge cold-cathode pumps (A review)

SOURCE: Pribory* i tekhnika eksperimenta, no. 2, 1964, 5-16

TOPIC TAGS: magnetic discharge pump, vacuum pump, fine vacuum pump, magnetic discharge cold cathode pump, Vacion pump, Penning discharge pump, NEM Soviet make pump

ABSTRACT: A review of the exhaustion mechanism, designs, and applications of magnetic-discharge cold-cathode pumps, based on 1956-63 Soviet sources and 1937-61 Western sources, is presented. Both the advantages and disadvantages of these pumps are listed and characteristics of some Soviet-made pumps are supplied. "In the Soviet Union, pumps of this kind are built for a rate-of-exhaustion of 0.2, 8, 30, 100, 300, and 1,000 litr/sec; also, oilless exhaustion

Card 1/2

ACCESSION NR: AP4033096

sets based on magnetic-discharge pumps with 30, 100, and 300 litr/sec." The weight, size, and some design details of Soviet NEM-30-2, NEM-100-2, and NEM-300-1 pumps are given, as well as the weight and size of their power-supply units. Orig. art. has: 9 figures and 2 tables.

ASSOCIATION: Institut metallurgii (Institute of Metallurgy)

SUBMITTED: 09Apr62 DATE ACQ: 11May64 ENCL: 00

SUB CODE: PH, IE NO REF SOV: 005 OTHER: 024

Card 2/2

1. TILEPOVCVSKAYA, V. V.

2. USSR (600)

4. Electric Conductivity

7. Electric conductivity of colored cotton. Tekst. Prom. 12, no. 11, 195[illegible].

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

ORLOVA, Z.M., kand. tekhn. nauk, dots.; TALEPOROVSKAYA, V.V., kand. tekhn. nauk, dots.

Increasing the evenness of silver from LVS-305 drawing frames. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.1:78-82 '58. (MIRA 11:5)

1. Ivanovskiy tekstil'nyy institut.
(Spinning machinery)

ORLOVA, Z.M.; TALEPOROVSKAYA, V.V.

Establishing operating cycles for vertical and horizontal openers used in processing machine-gathered cotton. Izv.vys.ucheb.zav.; tekh.tekst.prom. no.2:67-74 '58. (MIRA 11:5)

1. Ivanovskiy tekstil'nyy institut.
(Cotton machinery)

ZOTIKOV, V.Ye., prof., doktor tekhn.nauk; BUDNIKOV, I.V.; TRYKOV, P.P.; GINZBURG, L.N., retsenzent; KARPOV, L.I., retsenzent; ORLOVA, Z.M., retsenzent; TALEPOROVSKAYA, V.V., retsenzent; FINKEL'SHTEYN, I.I., retsenzent; KOPELEVICH, Ye.I., red.; SHAPENKOVA, T.A., tekhn.red.

[Fundamentals of the spinning of fabrics] Osnovy priadeniia voloknistykh materialov. Pod red. V.E.Zotikova. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl., 1959. 506 p. (MIRA 12:11)

1. Kafedra pryadeniya khlopka Ivanovskogo tekhnologicheskogo instituta (IvTI) (for Karpov, Orlova, Taleporovskaya, Finkel'shteyn).
(Spinning)

1. [illegible], L.I.

2. USSR (600)

4. Electric Meters

7. Portable measuring apparatus, nab.energ. 3 no. 3, 1953.

9. Monthly List of Russian Accessions. Library of Congress, APRIL 1953, Uncl.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754730008-6"

POL'MD/Optics - Photography K-13

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 9655

Author : Tadeusz Kazimierz
Inst : -
Title : Optical System of [illegible] Stationary [illegible] Objective

Orig Pub : Filmotechnik (Poland), 1958, 11, No 119, [illegible]

Abstract : Survey article.

Card : 1/1

[illegible], L.

[illegible]

[illegible]

TALER, Z.

List of fresh-water fishes and the areas they inhabit in Yugoslavia, p. 425, (GLASNIK, No. 5/6, 1953, Belgrade, Yugoslavia)

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 1 Jan. 1955, Uncl.

[illegible], S.; [illegible], [illegible]; [illegible], V.

Characteristic diagrams and indexes of load capacity in power systems. p. 338.

Vol. [illegible], No. [illegible], Sept. 1959
[illegible] DR
Prague, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 6, No. 2, August 1956

BEYGEL', Z., nauchnyy sotrudnik; TALESNIK, Ye., nauchnyy sotrudnik; DUSHNOV, Yu., nauchnyy sotrudnik; PARKHOMOVSKAYA, B., nauchnyy sotrudnik; GLUZMAN, M., nauchnyy sotrudnik

Effectiveness of manufacturing highly prefabricated reinforced concrete elements and joiner's articles. Zhil. stroi. no.1: 5-7 '64. (MIRA 18:11)

1. Nauchno-issledovatel'skiy institut zhelezobetonnykh izdeliy stroitel'nykh i nerudnykh materialov Glavnogo upravleniya promyshlennosti stroitel'nykh materialov i stroitel'nykh detaley.

[illegible]

[illegible], V.

Limestone and dolomite fillers of the Lithuanian SSR in the production of coarse-porous concrete.

p. 119 (Lietuvos TSR Mokslu Akademija. Fizikos-technikos institutas. Darbai. Vol. 2, 1956, Vilnius, Lithuania)

Monthly Index of Russian Accessions (MIRA) LC. Vol. 7, no. 2, February 1958

TALETAVICIUS, Vladas; ZOLYNAS, Ricardas; PRANAITIENE, R., red.; PAKEMYTE, O., tekhn. red.

[Sand concrete, a building material of the future]Smelio betonai - progresyvi statybine medziaga. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1962. 24 p. (MIRA 15:12)

(Concrete)

TALETSKIY, V.

Roll-call of generations. Sov. profsoiuzy 19 no.20:26-29 O '63. (MIRA 16:11)

1. Starshiy master tsekha shtampov i prisposobleniy Kirovskogo zavoda, Leningrad.

TALETSKIY, Vladimir Aleksandrovich; LEPIK, A.E., red.

[Along our fathers' path] Dorogoi ottsov. Leningrad, Lenizdat, 1964. 105 p. (MIRA 17:4)

1. Starshiy master tsekha shtampov i prisposobleniy Kirovskogo zavoda, Kirovskiy rayon, Leningradskaya oblast' (for Taletskiy).

TAMTAVICIUS, V.

Effect of the physicomechanical properties of inert aggregates on the strength of concrete made of rigid mixes. Trudy AN Lit. SSR. Ser. B no.2:243-251 '62. (MIRA 18:3)

1. Institut stroitel'stva i arkhitektury AN Litovskoy SSR.

TALEV, Risto, ing. (Skopje, Lenjinova 65)

Graphical representation of interdependence of the elements of various clothoids (similarity of clothoids). Tehnika Jug 16 no.11:1940-1943 '61.

1. Vodeci projektant preduzeca "Projektant", Skopje.

TALEV, Risto, ing. (Skopje, Lenjinova ul.65)

The Tabumer system. Tehnika Jug no.3:446-450 '62.

1. Projektant Projektantskog preduzeca "Projektant", Skopje.